

REMARKS/ARGUMENTS

In the Office Action, the Examiner rejected claims 1-25 under 35 U.S.C. 103(a) as being unpatentable over some combination of *Heddaya* et al. (US Pat. No. 6,205,481), *Balassanian* (US Pat. Application Publication No. 2005/0021857 A1), and *Dillon* (US Pat. No. 6,016,388). The rejections are respectfully traversed. Reconsideration of the application is respectfully requested based on the following remarks.

Claims 1, 16, 20, and 22 have been amended to further clarify the subject matter regarded as the invention. Support for the amendments can be found in original claim 16, Fig. 2, page 10, lines 2-9, and elsewhere in the specification. Accordingly, claims 1-25 remain pending in this application.

PATENTABILITY OF CLAIMS 1-25

Claim 1 relates to "[a] computer-implemented method for routing data traffic in a network having a plurality of network layers including an application layer." The method includes: "receiving the data traffic at a network cache; selecting one of a plurality of routing options for the data traffic with reference to information in the application layer; and routing the data traffic according to the selected routing option." Claim 21 recites similar limitations as claim 1, but in an apparatus format.

Claim 16 relates to "[a] computer-implemented method for routing data traffic in a network which has been redirected to a network cache." The method includes: "receiving the data traffic with the network cache; selecting one of a plurality of routing options for the data traffic with reference to information in the application layer about the data traffic accessible by the network cache; and routing the data traffic according to the selected routing option." Claim 22 recites a similar limitation as claim 16, but in an apparatus format.

Claim 20 relates to "[a] computer-implemented method for routing data traffic in a network having a plurality of layers including physical, data link, and network layers." The method includes: "receiving the data traffic at a network cache; selecting one of a plurality of routing options for the data traffic with reference to a type of information outside of the physical, data link, and network layers; and routing the data traffic according to the selected routing option." Claim 23 recites a similar limitation as claim 20, but in an apparatus format.

The Examiner rejected the independent claims 1, 16, 20, 21, 22, and 23 under 35 U.S.C. 103(a) as being unpatentable over *Heddaya* et al. in view of *Balassanian*. The rejection is respectfully traversed.

Heddaya et al. describes “[a] technique for automatic, transparent, distributed, scalable and robust replication of document copies in a computer network wherein request messages for a particular document follow paths from the clients to a home server that form a routing graph.” (See Abstract) Document request messages are sent in the form of Uniform Resource Locators (URLs) using the TCP/IP layered protocol. (See column 6, lines 22-24) In particular, when a request message packet enters a router 14, the router passes the request message to a filter code. (See column 7, lines 46-48) The “filter causes the interception of the packet (for an attempted service by the local cache server 16) or passes the packet back to the router 14 to determine the next hop the packet should take on its way to the home server 20.” (See column 7, lines 48-56) The router implements the packet filter 26 and an IP proxy or snooper 28 “at a lower layer, such as the physical layer.” (See column 7, line 64 to column 8, line 4 and Fig. 2)

Heddaya et al. further describes that routers 14 take an active role in assisting cache servers 16 to achieve cache server and/or communication path balancing goals. This is accomplished by allowing the resource manager 24 to inject functionality into the router 14 in the form of the code that implements the filter 26 and snooper 28. In particular, all packets passing through a router 14 not addressed directly to a host server 20 are first passed to the snooper 28. The snooper 28 inspects a packet and determines its type, destination, and the document requested. Depending on the state of the cache server 16 and packet type, the snooper 28 could intercept the packet or simply forward the packet to the next hop, or router 14, along the intended destination path to the home server 20. (See column 8, lines 55-67)

Balassanian teaches a method and system for routing media from a source resource on a source appliance across a network to a destination (target) resource on a destination (target) appliance. (See Abstract) *Balassanian* further teaches having a mapping algorithm on the target appliance to decide what resource on the target appliance the data should be directed. The target appliance directs data to default resources depending on the content-type the data represents based on the mapping algorithm. For example, media of source content-type PCM might be mapped by the mapping algorithm to a speaker. (See paragraph [0060])

Even if the concept of routing based on document type is described in *Balassanian*, it does not follow that “[i]t would have been obvious to one having ordinary skill in the art at the time the invention was made to have incorporated the method of routing based on information in the application layer, such as document type (e.g., jpg, htm, gif) as taught by *Balassanian*, into the networked cache system of *Heddaya* for the purpose of routing data based on data content in addition to destination address.” The Examiner has not provided any motivation whatsoever to combine the teachings of *Heddaya* et al. with *Balassanian*, and is inappropriately relying on

hindsight to obviate the present invention. As stated in section 2143.01 of the MPEP, "[o]bviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art." The Examiner has not identified the "teaching, suggestion, or motivation" upon which his rejection is based.

In fact, *Heddaya et al.* teaches away from combining or modifying the teachings of the cited art. This is because in view of the above, *Heddaya et al.* merely teaches: 1) using a simple technique for forwarding a request message packet; 2) forwarding the request message packet along a intended (i.e., predetermined) destination path; and 3) implementing a filter/snooper for handling the request message packet in the lower layer, such as the physical layer. There would be no motivation to implement a complex technique (i.e., mapping algorithm of *Balassanian*) for determining/selecting the routing of the request message packet when an intended (i.e., predetermined) destination path is already employed.

Another reason there is no motivation to combine the cited art *Heddaya et al.* and *Balassanian* is because *Heddaya et al.* explicitly states as an advantage that the disclosed document caching system "does not need ... to redirect document requests." (See column 4, lines 49-54) As such, there would be no motivation to incorporate the routing scheme of *Balassanian* to "redirect document requests" in the caching protocol/system of *Heddaya et al.* Therefore, claims 1, 16, 20, 21, 22, and 23 are further patentable for these reasons.

The Examiner's rejections of the dependent claims are respectfully traversed. However, to expedite prosecution, all of these claims will not be argued separately. Claims 2-15, 17-19, and 24-25 each depend either directly or indirectly from independent claims 1 or 16 and, therefore, are respectfully submitted to be patentable over cited art for at least the reasons set forth above with respect to claims 1 or 16. Further, the dependent claims require additional elements that when considered in context of the claimed inventions further patentably distinguish the invention from the cited art.

SUMMARY

It is respectfully submitted that all pending claims are allowable and that this case is now in condition for allowance. Should the Examiner believe that a telephone conference would expedite the prosecution of this application, the undersigned can be reached at the telephone number set out below.

If any fees are due in connection with the filing of this Amendment, the Commissioner is authorized to deduct such fees from the undersigned's Deposit Account No. 50-0388 (Order No. CISCPI39).

Respectfully submitted,
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